Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-8. (Canceled)

9. (Currently Amended) A method for recording data in an optical recording medium ~~in accordance with Claim 3,~~ wherein the optical recording medium includes a substrate, a protective layer and a plurality of information recording layers between the substrate and the protective layer, the method for recording data in an optical recording medium comprising:

projecting a laser beam onto the plurality of information recording layers whose power is modulated between at least three levels including a level corresponding to a recording power, a level corresponding to an intermediate power lower than the recording power and a level corresponding to a bottom power lower than the intermediate power onto at least one information recording layer other than an information recording layer farthest from the light incidence plane; and

forming a recording mark in the at least one information recording layer other than the information recording layer farthest from the light incidence plane, thereby recording data therein,

wherein the power of the laser beam is set to the bottom power when it is projected onto the end portion of each of the recording marks, and, wherein the power of the laser beam is modulated so that a time period during which the power of the laser beam is set to the bottom power for forming the end portion of each of the recording marks becomes longer as a linear recording velocity is higher.

10. (Currently Amended) A method for recording data in an optical recording medium in accordance with ~~Claim 4~~ claim 9, wherein the ~~power~~ level of the ~~laser beam~~ bottom

power is ~~modulated so that a time period during which the power of the laser beam is set to the bottom power for forming the end portion of each of the recording marks becomes longer as a linear recording velocity is higher~~ set so that a region of the at least one information recording layer other than the information recording layer farthest from the light incidence plane heated by irradiation with the laser beam whose power is set to the recording power can be cooled during irradiation with the laser beam whose power is set at the bottom power.

11. (Currently Amended) A method for recording data in an optical recording medium in accordance with ~~Claim 7~~ claim 9, wherein the power of the laser beam is ~~modulated so that a time period during which the power of the laser beam is set to the bottom power for forming the end portion of each of the recording marks becomes longer as a linear recording velocity is higher~~ set to the intermediate power when it is projected onto a region between neighboring recording marks to be formed in the at least one information recording layer other than the information recording layer farthest from the light incidence plane.

12. (Currently Amended) A method for recording data in an optical recording medium in accordance with ~~Claim 8~~ claim 10, wherein the power of the laser beam is ~~modulated so that a time period during which the power of the laser beam is set to the bottom power for forming the end portion of each of the recording marks becomes longer as a linear recording velocity is higher~~ set to the intermediate power when it is projected onto a region between neighboring recording marks to be formed in the at least one information recording layer other than the information recording layer farthest from the light incidence plane.

13. (Currently Amended) A method for recording data in an optical recording medium in accordance with ~~Claim 1~~ claim 9, wherein data are recorded by employing an objective lens and a laser beam whose numerical aperture NA and wavelength λ satisfy $\lambda/NA \leq$ 640 nm, and projecting the laser beam onto the optical recording medium via the objective lens.

14. (Currently Amended) A method for recording data in an optical recording medium in accordance with ~~Claim 2~~ claim 10, wherein data are recorded by employing an objective lens and a laser beam whose numerical aperture NA and wavelength λ satisfy $\lambda/NA \leq$ 640 nm, and projecting the laser beam onto the optical recording medium via the objective lens.

15. (Currently Amended) A method for recording data in an optical recording medium in accordance with ~~Claim 1~~ claim 9, wherein the protective layer is formed of a light transmissible material and the laser beam is projected onto the plurality of the information recording layers via the protective layer.

16. (Currently Amended) A method for recording data in an optical recording medium in accordance with ~~Claim 2~~ claim 10, wherein the protective layer is formed of a light transmissible material and the laser beam is projected onto the plurality of the information recording layers via the protective layer.

17. (Currently Amended) An apparatus for recording data in an optical recording medium wherein the optical recording medium includes a substrate, a protective layer and a plurality of information recording layers between the substrate and the protective layer and a laser beam is projected onto the plurality of information recording layers via a light incidence plane constituted by either the substrate or the protective layer, thereby recording data in the plurality of information recording layers, the apparatus for recording data in an optical recording medium being constituted so as to project a laser beam whose power is modulated between at least three levels including a level corresponding to a recording power, a level corresponding to an intermediate power lower than the recording power and a level corresponding to a bottom power lower than the intermediate power onto at least one information recording layer other than an information recording layer farthest from the light incidence plane and form a recording mark in the at least one information recording layer other than the information recording layer farthest from the light incidence plane, thereby recording data therein~~,~~

wherein the power of the laser beam is set to the bottom power when it is projected onto the end portion of each of the recording marks, and

wherein the power of the laser beam is modulated so that a time period during which the power of the laser beam is set to the bottom power for forming the end portion of each of the recording marks becomes longer as a linear recording velocity is higher.

18. (Currently Amended) An optical recording medium which includes a substrate, a protective layer and a plurality of information recording layers between the substrate and the protective layer and is constituted so that a laser beam is projected onto the plurality of information recording layers via a light incidence plane constituted by either the substrate or the protective layer, thereby recording data in the plurality of information recording layers, the optical recording medium being recorded with first data for setting data recording conditions necessary for projecting a laser beam whose power is modulated between at least three levels including a level corresponding to a recording power, a level corresponding to an intermediate power lower than the recording power and a level corresponding to a bottom power lower than the intermediate power onto at least one information recording layer other than an information

recording layer farthest from the light incidence plane when a recording mark is to be formed in the at least one information recording layer other than an information recording layer farthest from the light incidence plane, thereby recording data therein~~.~~

wherein the optical recording medium is further recorded with second data for setting data recording conditions necessary for setting the power of the laser beam to the bottom power when it is projected onto the end portion of each of the recording marks and modulating the power of the laser beam so that a time period during which the power of the laser beam is set to the bottom power for forming the end portion of each of the recording marks becomes longer as a linear recording velocity is higher.

19. (New) An apparatus for recording data in an optical recording medium in accordance with Claim 17, wherein the level of the bottom power is set so that a region of the at least one information recording layer other than the information recording layer farthest from the light incidence plane heated by irradiation with the laser beam whose power is set to the recording power can be cooled during irradiation with the laser beam whose power is set at the bottom power.

20. (New) An apparatus for recording data in an optical recording medium in accordance with Claim 17, wherein the power of the laser beam is set to the intermediate power when it is projected onto a region between neighboring recording marks to be formed in the at least one information recording layer other than the information recording layer farthest from the light incidence plane.

21. (New) An apparatus for recording data in an optical recording medium in accordance with Claim 19, wherein the power of the laser beam is set to the intermediate power when it is projected onto a region between neighboring recording marks to be formed in the at least one information recording layer other than the information recording layer farthest from the light incidence plane.

22. (New) An apparatus for recording data in an optical recording medium in accordance with Claim 17, wherein data are recorded by employing an objective lens and a laser beam whose numerical aperture NA and wavelength λ satisfy $\lambda/NA \leq 640$ nm, and projecting the laser beam onto the optical recording medium via the objective lens.

23. (New) An apparatus for recording data in an optical recording medium in accordance with Claim 19, wherein data are recorded by employing an objective lens and a laser beam whose numerical aperture NA and wavelength λ satisfy $\lambda/NA \leq 640$ nm, and projecting the laser beam onto the optical recording medium via the objective lens.

24. (New) An optical recording medium in accordance with Claim 18, which is further recorded with third data for setting data recording conditions necessary for setting the level of the bottom power so that a region of the at least one information recording layer other than the information recording layer farthest from the light incidence plane heated by irradiation with the laser beam whose power is set to the recording power can be cooled during irradiation with the laser beam whose power is set at the bottom power.

25. (New) An optical recording medium in accordance with Claim 18, which is further recorded with third data for setting data recording conditions necessary for setting the power of the laser beam to the intermediate power when it is projected onto a region between neighboring recording marks to be formed in the at least one information recording layer other than the information recording layer farthest from the light incidence plane.

26. (New) An optical recording medium in accordance with Claim 24, which is further recorded with third data for setting data recording conditions necessary for setting the power of the laser beam to the intermediate power when it is projected onto a region between neighboring recording marks to be formed in the at least one information recording layer other than the information recording layer farthest from the light incidence plane.

27. (New) An optical recording medium in accordance with Claim 18, wherein the protective layer is formed of a light transmissible material and the laser beam is projected onto the plurality of the information recording layers via the protective layer.

28. (New) An optical recording medium in accordance with Claim 24, wherein the protective layer is formed of a light transmissible material and the laser beam is projected onto the plurality of the information recording layers via the protective layer.